

EXHIBIT 2

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

Exhibit 615-3
Invalidity Claim Chart for U.S. Patent No. 9,967,615 (“the ’615 patent”)

YouTube Remote and YouTube Leanback, including the YouTube Remote application (“the YT Remote System”) was described in a printed publication, or in public use, on sale, sold, known in this country, or otherwise available to the public before the priority date of the ’615 patent. Features of the YouTube Remote would have been apparent to a person of ordinary skill in the art using the public systems, rendering the systems themselves § 102(a), (b) and (g) prior art.

Google identifies the authors, designers and implementers of the documents and source code identified and cited below as prior inventors under Section 102(g), including but not limited to Ramona Bobohalma.

At least the following documents describe the functionality of the YT Remote System:

- [1] <https://youtube.googleblog.com/2010/11/control-youtube-on-desktop-or-tv-with.html>, By Kuan Yong, Senior Product Manager, Nov 9, 2010
- [2] <https://www.youtube.com/watch?v=txIPVu6yngQ>, posted Nov 9, 2010
- [REDACTED]
- [4] <https://www.youtube.com/watch?v=EGdsOslqG2s>, Nov 14, 2010
- [5] <https://lifehacker.com/remote-control-youtube-on-your-tv-or-computer-from-your-5685752>, Nov 9, 2010
- [REDACTED]
- [REDACTED]
- [8] US 9,490,998
- [9] <https://web.archive.org/web/20111014181427/https://market.android.com/details?id=com.google.android.ytremote>
- [10] <https://palblog.fxpal.com/?p=4953>, Lean back with YouTube and Android by Surendar Chandra, November 11, 2010 (available at <https://web.archive.org/web/20111106221315/https://palblog.fxpal.com/?p=4953>)
- [11] Engadget Article, YouTube Remote app released, controls Leanback on GTV or PC from your Android phone, November 9, 2010

Google also relies on Google source code, both server-side code and device-side code, including any written source code, source code in production, and released source code, including the exemplary code paths referred to below. Google expressly reserves the right to rely on additional source code at a later time.

To the extent publicly available, these documents themselves are also each individually prior art under § 102(a), (b) or (e) and § 103 based on their dates of publication and public availability.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

To the extent it is argued the YT Remote System does not disclose any element, that element would be obvious based on the state of the art and/or in combination with one or more of the references noted in Riders I-K.

To avoid duplication and cumulative excerpts, exemplary quotations and citations are provided. The citations to portions of any reference in this chart are exemplary only. Google reserves the right to use the entirety of any reference cited in this chart to show that the asserted claims are anticipated and/or obvious, or to show the state of the art at the relevant time. References to figures should be understood to also refer to any accompanying text. Additional support can be found elsewhere in the prior art reference, and Google expressly reserves the right to rely on such other support and passages at a later time. The use of claim terms in the below chart is based on Sonos' construction of claim terms in its infringement contentions as understood by Google, as well as the plain and ordinary meaning of the claim terms. This chart should not be construed as consenting to or agreeing with Sonos' construction of claim terms. Because discovery is ongoing and the Court has not completed the claim construction process, Google reserves all rights to amend its invalidity contentions based on new information produced in discovery or on the Court's constructions.

Google expressly reserves the right to supplement its invalidity contentions, including this chart, to demonstrate that the prior art invalidates the claims of the '615 patent.

Claim 1 Portion	Claim 1 Text	YT Remote System
[1Pre]	<i>A method comprising: causing, via a control device, a graphical interface to display a control interface including one or more transport controls to control playback by the control device;</i>	YT Remote System discloses a method comprising: causing, via a control device, a graphical interface to display a control interface including one or more transport controls to control playback by the control device. <i>See claim element [13a] below.</i>
[1a]	<i>after connecting to a local area network via a network interface, identifying, via the control device, playback devices connected to the local area network;</i>	YT Remote System discloses after connecting to a local area network via a network interface, identifying, via the control device, playback devices connected to the local area network. <i>See claim element [13b] below.</i>
[1b]	<i>causing, via the control device, the graphical interface to display a selectable option for transferring playback from the control device;</i>	YT Remote System discloses causing, via the control device, the graphical interface to display a selectable option for transferring playback from the control device. <i>See claim element [13c] below.</i>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[1c]	<i>detecting, via the control device, a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network;</i>	YT Remote System discloses detecting, via the control device, a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network <i>See claim element [13d] below.</i>
[1d]	<i>after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device,</i>	YT Remote System discloses after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device <i>See claim element [13e] below.</i>
[1e]	<i>wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service;</i>	YT Remote System discloses transferring playback from the control device to the particular playback device comprising: (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service <i>See claim element [13f] below.</i>
[1f]	<i>(b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and</i>	YT Remote System discloses (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device. <i>See claim element [13g] below.</i>
[1g]	<i>causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the</i>	YT Remote System discloses causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

	<i>particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.</i>	playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content. See claim element [13h] below.
[2a]	<i>The method of claim 1, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair,</i>	See claim element [14a] below.
[2b]	<i>wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair.</i>	See claim element [14b] below.
[3a]	<i>The method of claim 1, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device,</i>	See claim element [15a] below.

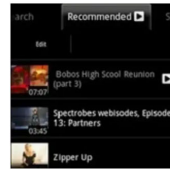
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[3b]	<i>wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony.</i>	See claim element [15b] below.
[6a]	<i>The method of claim 1, further comprising detecting, via the control device, a set of inputs to transfer playback from the playback device back to the control device,</i>	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System discloses detecting, via the control device, a set of inputs to transfer playback from the playback device back to the control device. See claim element [13g] below.
[6b]	<i>wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device.</i>	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System discloses wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device. See claim element [13g] below.
[7a]	<i>The method of claim 1, wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and</i>	See claim element [19a] below.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[7b]	<i>wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the particular playback device in the particular arrangement.</i>	See claim element [19b] below.
[8]	<i>The method of claim 1, wherein causing the one or more first cloud servers to add multimedia content to the local playback queue comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service.</i>	See claim 20 below.
[9]	<i>The method of claim 1, wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device.</i>	See claim 21 below.
[11]	<i>The method of claim 1, wherein detecting the set of inputs comprises detecting an input that causes playback at the control device to be stopped.</i>	See claim element [23] below.
[12]	<i>The method of claim 1, wherein detecting the set of inputs comprises detecting selection of a button on the control interface.</i>	See claim element [24] below.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[13pre]	<p><i>A tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method comprising:</i></p>	<p>YT Remote System discloses a tangible, non-transitory computer readable storage medium including instructions for execution by a processor, the instructions, when executed, cause a control device to implement a method.</p> <p><i>See e.g.</i> [1]: “YouTube Remote creates a virtual connection between your phone and YouTube Leanback. To ‘pair’ your phone with your Leanback screen, simply sign into YouTube Remote on your Android phone, and to YouTube Leanback on your Google TV or computer with the same YouTube account. Just like that, you’ve connected your powerful multi-touch Android screen with the biggest screen in your home. Once connected, you can use the rich browse and discovery interface on YouTube Remote to find and queue up videos to watch, and send them all to Leanback with a single tap. With YouTube Remote you can play, pause, skip forward and back and even control the sound volume.”</p> <p><i>See e.g.</i> [5]</p> <div>  </div> <p>Android: YouTube Remote is a free remote control tool that links the full-screen experience of YouTube Leanback with the convenience of having a touch-screen remote and playlist builder on your Android device.</p> <div style="background-color: black; height: 25px; width: 100%;"></div> <p><i>See e.g.</i> [8] at 1:39-50:</p> <p>In general, this disclosure is directed to techniques for exchanging information between a networked device. Such as a network-enabled television, and web-enabled device, Such as a remote control, via a network service (e.g., a "cloud service"). In an example, the web-enabled device can transmit control information via the network service to the networked device to control playback of media content (e.g., audio and/or video content) on the networked device. In</p>
---------	--	---

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>another example, the networked device can transmit content information via the network service to the web-enabled device. Such as status information concerning the networked device.</p>
--	--	--

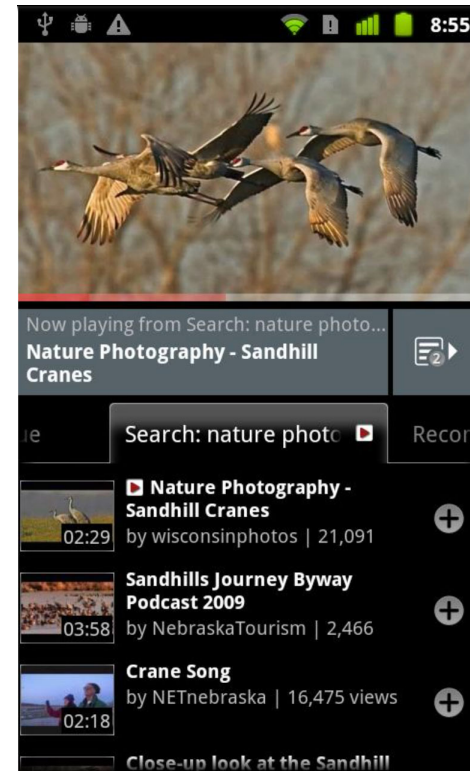
See also [8] at 3:14-55:

Techniques of this disclosure relate to a network service or 'cloud service' that acts as an intermediary between a remote control device and a controlled device. For example, the network service may receive commands from a remote control and transmit the commands to a controlled device. The network service may also receive commands or other information from the controlled device and transmit those commands or other information to the remote control. The remote control may include a remote control application executing on a mobile device. Such as a cellular telephone or a tablet computer. The controlled device may include any Internet-connected device capable of receiving commands, Such as an Internet-connected television, a set top box, a personal video recorder, a gaming console, or other net worked device. In one aspect, the remote control and the controlled device may operate as simple Hypertext Transfer Protocol HTTP clients of the network service. That is, the controlled device does not operate as a server to the remote control. Thus, any HTTP-enabled device may operate as a remote control or as a controlled device. In general, the remote control and the controlled device are configured to both listen for messages from the network service and send messages to the network service. In some examples, the network service controls pairing one or more remote controls and one or more controlled devices, receives information or commands from remote controls and controlled devices, and sends information or commands to remote controls and controlled devices. The network service may direct received information and commands to the appropriate devices based on pairing information maintained by the network service. A remote control may be configured to send a message to a controlled device to perform a task, Such as stopping playback of media content playing on the controlled devices or changing the media content

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

playing on the controlled devices. To accomplish the task, the remote control first sends a message to the network service. The network service then determines the controlled device that is paired with the remote control and forwards the message to the appropriate controlled device. The controlled device receives the message from the network service and performs the task in response to receiving the message.

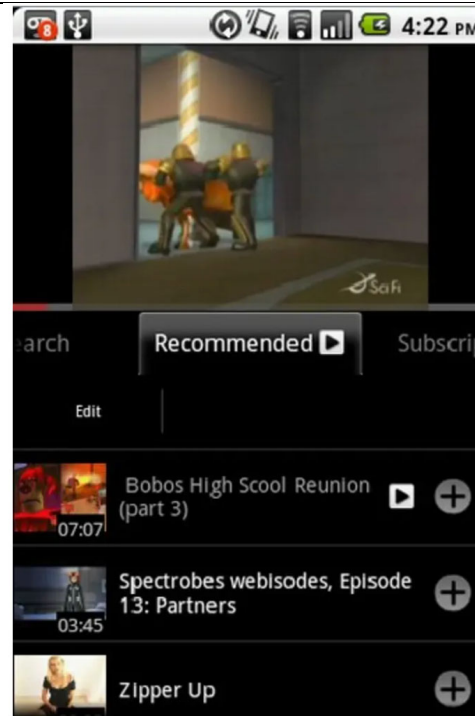
See e.g. [9]:



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Riders J-K. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13a]	<p><i>causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device;</i></p>	<p>YT Remote System discloses causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device.</p> <p><i>See e.g. [5]</i></p> <p>YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer.</p> <p>You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [8] at 8:54-11:6 and Fig. 3.

See e.g. [8] at 4:58-67:

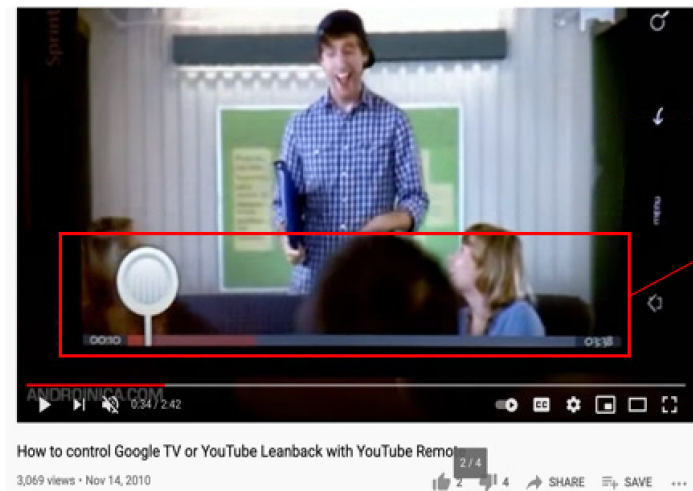
FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in accordance with one aspect of the present disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively “servers 24”) in network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled device 18, and servers 24 may be distinct components (e.g., physically distinct).

See e.g. [8] at 12:50-65:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

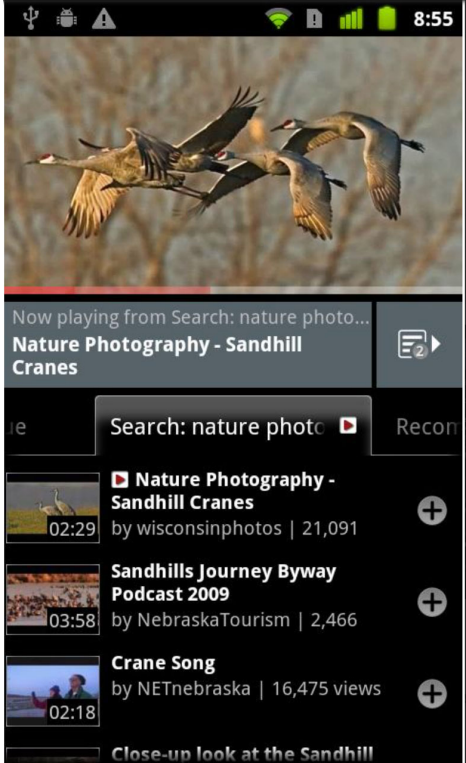
In some examples, any application of applications 130 executed by processor 132 may require data from one or more of servers, such as servers 24 shown in FIG. 1. Network module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor 132 for further processing. Network module 136 may support wireless or wired communication, and includes appropriate hardware and software to provide wireless or wired communication. For example, network module 136 may include an antenna, modulators, demodulators, amplifiers, and other circuitry to effectuate communication between controlled device 118 and one or more servers associated with a network. Network module may 100 may communicate with one or more servers associated with the network according to a network communication protocol, such as, for example, hypertext transfer protocol (HTTP), HTTP secured by transport layer security or secure sockets

See e.g. [4]:



See e.g. [9]:

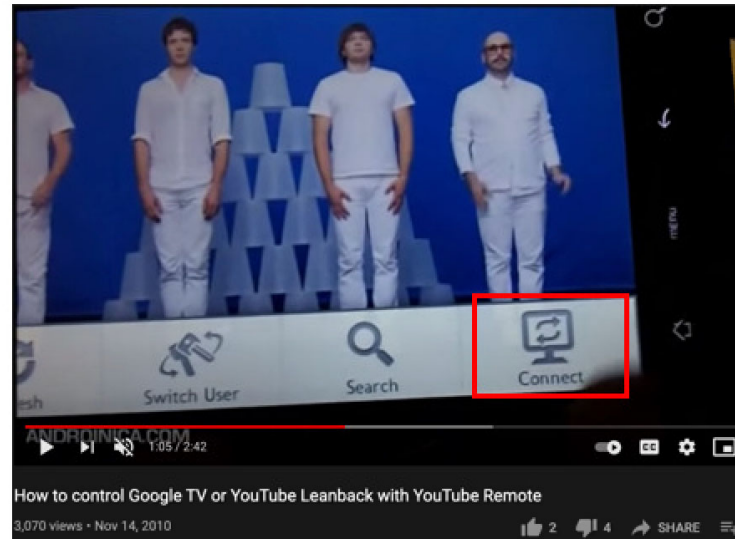
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		 <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13b]	after connecting to a local area network via a network interface, identifying playback devices connected to the local area network;	YT Remote System discloses after connecting to a local area network via a network interface, identifying playback devices connected to the local area network.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<div style="background-color: black; width: 100%; height: 100%;"></div> <p><i>See e.g.</i> [5]:</p> <p>To use YouTube Remote you'll need a YouTube account. Your YouTube login credentials are the glue that binds the Android remote to what's happening on YouTube Leanback. YouTube Remote is a free application, you can download it by scanning the QR code at right or searching for "YouTube Remote" in the Android Market.</p> <p>The YT remote identifies devices connected to the same LAN and connected to the same account. <i>See e.g.</i> [4]:</p>
--	--	--

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [8] at 4:21-57:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session. In another example, a user may be presented with a quick response (“QR”) code via the controlled device that the user scans with the remote control (e.g., using a camera of the remote control). The QR code identifies a user account or previously initiated session maintained by the network Service. Upon Scanning the QR code, the remote control may send a message to the network service indicating that the network service should assign a unique identification number to the remote control and pair the remote control with the user account or session identified by the QR code. In this manner, one or more remote controls may control one or more controlled devices via the network service.

Using the network service to transmit and receive messages between a remote control and a controlled device may enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each other. The network service may also enable pairing of a nearly limitless number of remote controls and controlled devices.

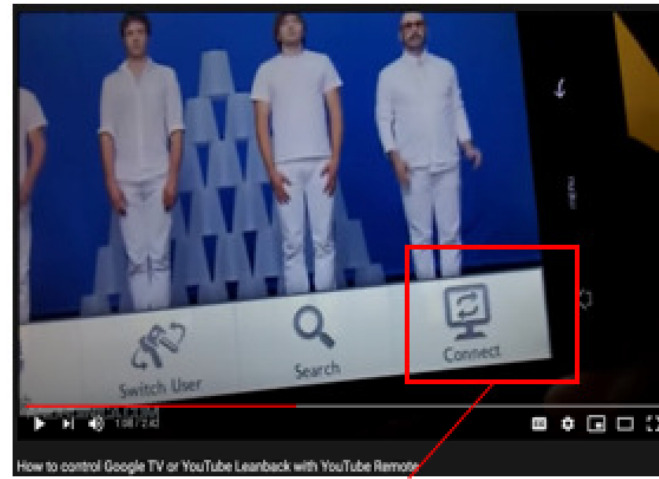
See e.g. [10]:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>“The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”</p> <p><i>See e.g.</i> [11]</p> <p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to <u>keep other remotes handy</u>.</p> <p>[REDACTED]</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p> <p>For example, it would have been obvious to combine these references with the Tungsten's identification of playback device. (https://www.youtube.com/watch?v=OxzucwjFEES)</p>
[13c]	<i>causing the graphical interface to display a selectable option for transferring playback from the control device;</i>	YT Remote System discloses causing the graphical interface to display a selectable option for transferring playback from the control device.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

The YT Remote System identifies devices connected to the same LAN and connected to the same account and . *See e.g.* [4]:



Selectable option

See e.g. [8] at 4:21-57:

Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session. In another

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

example, a user may be presented with a quick response (“QR”) code via the controlled device that the user scans with the remote control (e.g., using a camera of the remote control). The QR code identifies a user account or previously initiated session maintained by the network Service. Upon Scanning the QR code, the remote control may send a message to the network service indicating that the network service should assign a unique identification number to the remote control and pair the remote control with the user account or session identified by the QR code. In this manner, one or more remote controls may control one or more controlled devices via the network service. Using the network service to transmit and receive messages between a remote control and a controlled device may enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each other. The network service may also enable pairing of a nearly limitless number of remote controls and controlled devices.

See also [8] e.g. at 8:1-59 (Pairing of remote controls with controlled device).

[REDACTED]

See e.g. [10]:

“The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”

See e.g. [11]

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to <u>keep other remotes handy</u>.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13d]	<p><i>detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network:</i></p>	<p>The YT Remote System discloses detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network.</p> <p>The YT Remote System implicitly detects a set of inputs once the “connect” option is selected, based on devices on the same LAN for which user is logged in, e.g. a TV screen logged into the user's YouTube account.</p> <p><i>See e.g. [4]</i></p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



Set of inputs detected

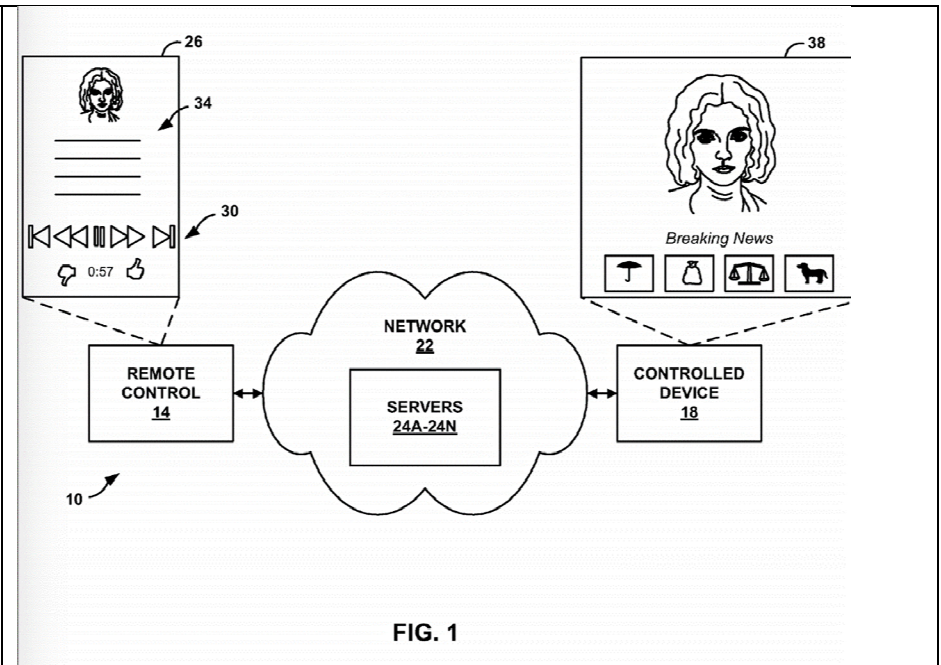
See e.g. [8] at 4:21-57:

Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session. In another example, a user may be presented with a quick response (“QR”) code via the controlled device that the user scans with the remote control

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

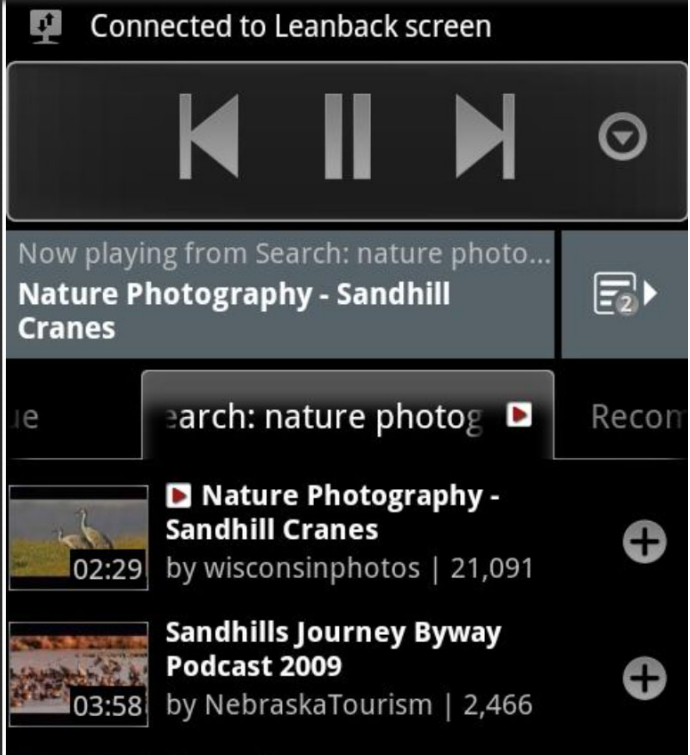
		<p>(e.g., using a camera of the remote control). The QR code identifies a user account or previously initiated session maintained by the network Service. Upon Scanning the QR code, the remote control may send a message to the network service indicating that the network service should assign a unique identification number to the remote control and pair the remote control with the user account or session identified by the QR code. In this manner, one or more remote controls may control one or more controlled devices via the network service.</p> <p>Using the network service to transmit and receive messages between a remote control and a controlled device may enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each other. The network service may also enable pairing of a nearly limitless number of remote controls and controlled devices.</p> <p><i>See also</i> [8] e.g. at 8:1-59 (Pairing of remote controls with controlled device).</p> <p><i>See e.g.</i> [8] at 4:58-67:</p> <p>FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in accordance with one aspect of the present disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively “servers 24”) in network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled device 18, and servers 24 may be distinct components (e.g., physically distinct).</p>
--	--	--

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [9]:

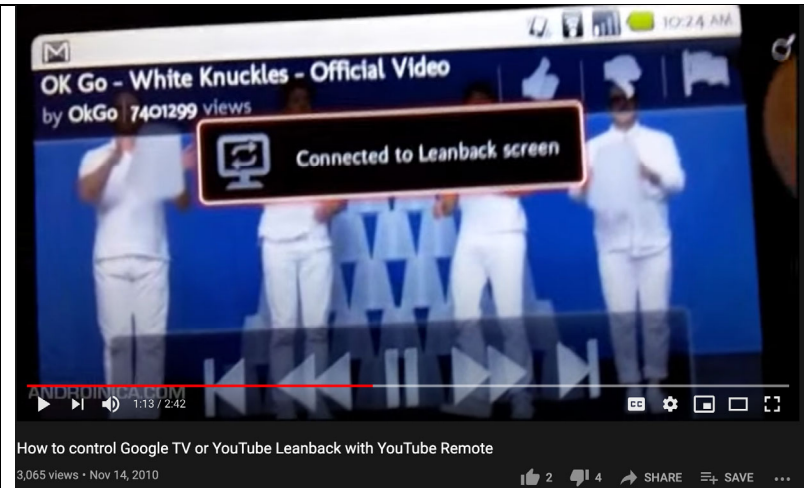
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		 <p>The screenshot shows a Leanback interface. At the top, it says 'Connected to Leanback screen'. Below that is a video player with controls (play, pause, stop, volume). The video title is 'Nature Photography - Sandhill Cranes'. Below the video player is a search bar with the text 'Search: nature photog'. To the right of the search bar is a 'Recon' button. Below the search bar are two search results. The first result is 'Nature Photography - Sandhill Cranes' by 'wisconsinphotos' with a duration of 02:29 and 21,091 views. The second result is 'Sandhills Journey Byway Podcast 2009' by 'NebraskaTourism' with a duration of 03:58 and 2,466 views. Both results have a plus icon to their right.</p> <p><i>See e.g.</i> [10]</p> <p>“The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”</p> <p><i>See e.g.</i> [11]:</p>
--	--	--

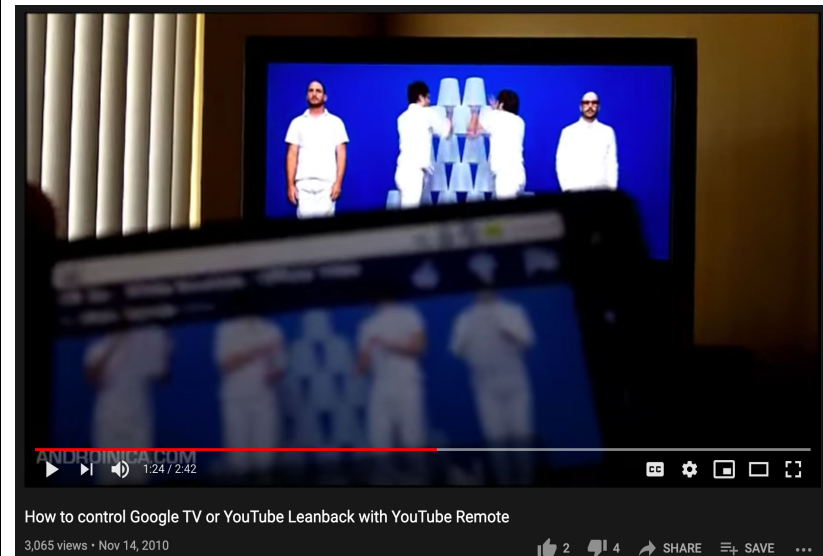
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy.</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13e]	<p><i>after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device,</i></p>	<p>YT Remote System discloses after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device.</p> <p>The YT Remote System displays an indication that the set of inputs was received, and displays an indication that YT remote is connected to the playback screen. <i>See e.g.</i> [4]:</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



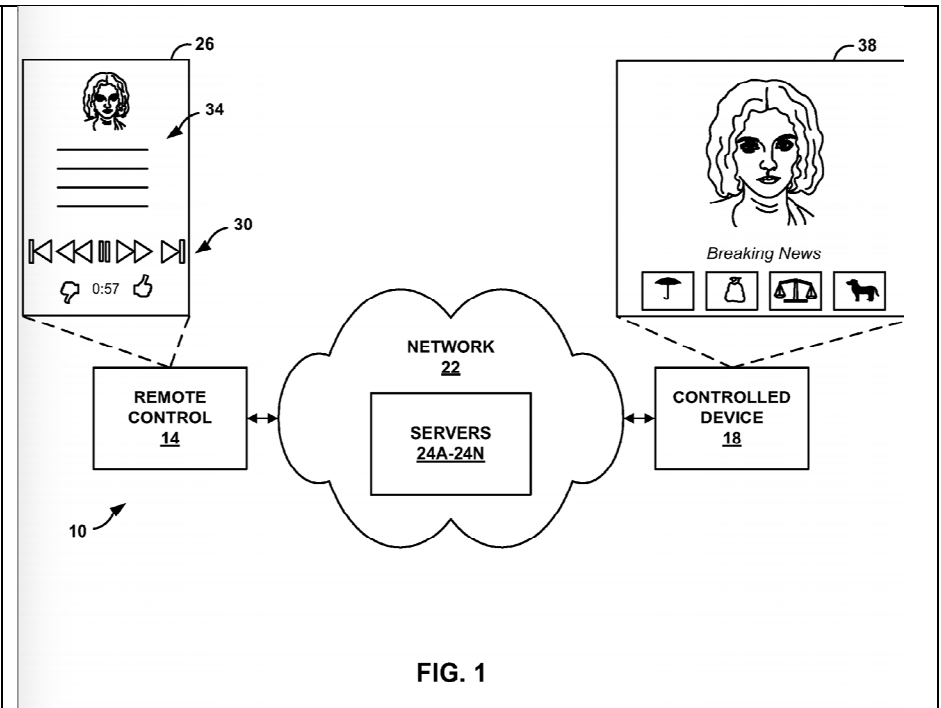
Playback is then transferred to the playback device (e.g. TV screen).
See e.g. [4]



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

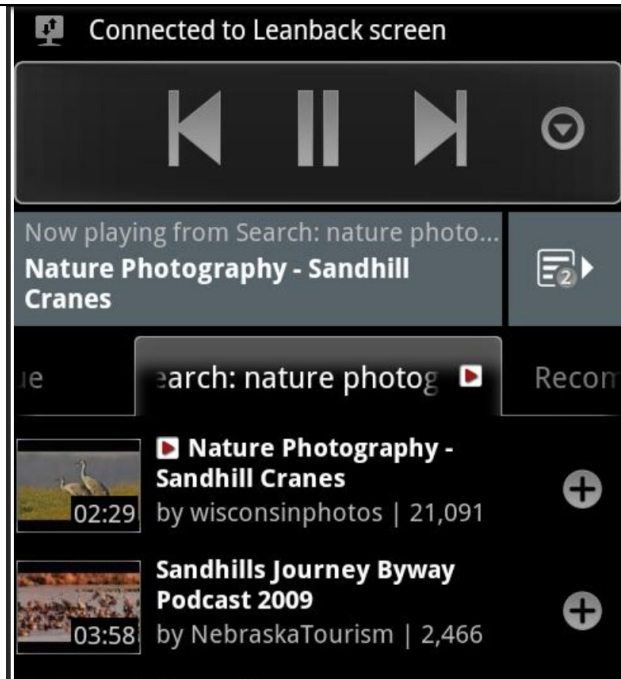
		<div style="background-color: black; width: 78px; height: 25px; margin-bottom: 5px;"></div> <p>For a lounge session there is only one playlist being played, the 'Now playing' list. The server keeps track of the playlist</p> <div style="background-color: black; width: 435px; height: 397px; margin-bottom: 5px;"></div> <p><i>See e.g. [8] at 4:58-67:</i></p> <p>FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in accordance with one aspect of the present disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively “servers 24) in network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled device 18, and servers 24 may be distinct components (e.g., physically distinct).</p>
--	--	---

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [9]:


HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		 <p><i>See e.g.</i> [10]</p> <p>“The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”</p> <p><i>See e.g.</i> [11]:</p>
--	--	--

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

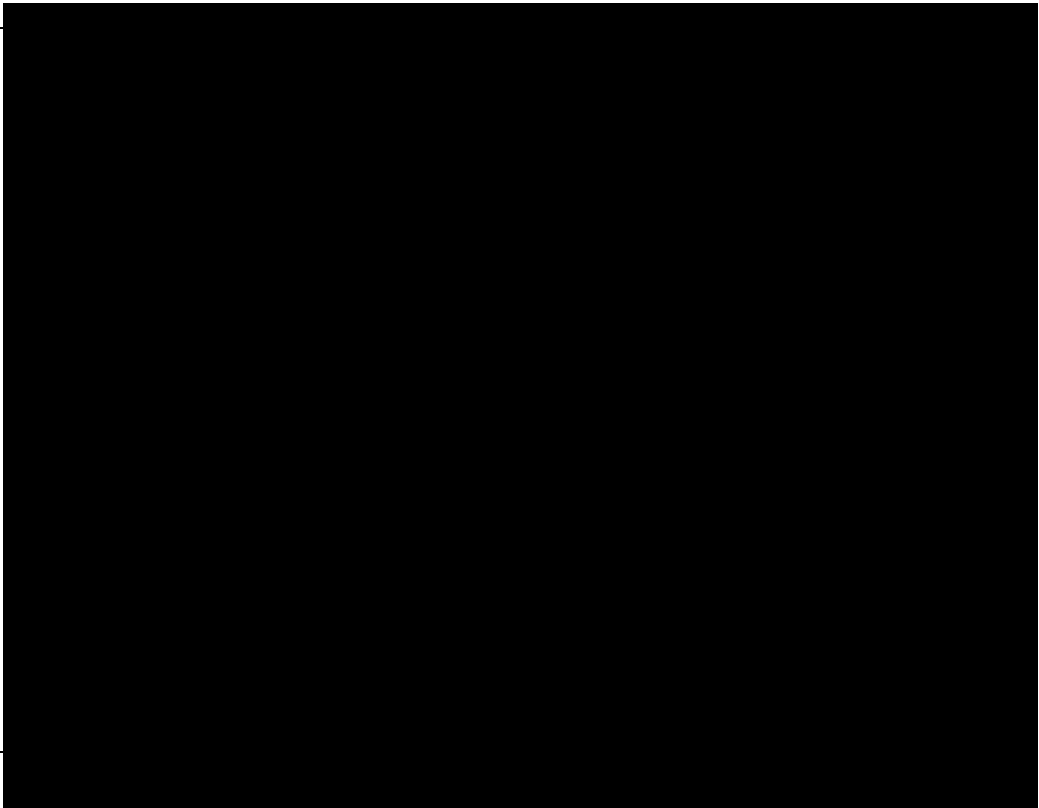
		<p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to <u>keep other remotes handy</u>.</p> <p>[REDACTED]</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Riders 1-J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13f]	<p><i>wherein transferring playback from the control device to the particular playback device comprises:</i></p> <p><i>(a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to</i></p>	<p>YT Remote System discloses wherein transferring playback from the control device to the particular playback device comprises:</p> <p>(a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

	<p><i>respective locations of the multimedia content at one or more second cloud servers of a streaming content service;</i></p>	<p>locations of the multimedia content at one or more second cloud servers of a streaming content service;</p> <p>The user's YT account includes playlists or channels, with videos automatically added to the user's feed. The playlist or channel comprise multimedia content added to a queue, which is accessed on the leanback screen.</p> <p>"When you search, your results end up in a channel and as soon as you finish playing one video, youtube leanback automatically plays the rest in sequence" (https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1)</p> <p>"Your feed is personalized to you, based on your youtube preferences ... and once one video ends, the next automatically begins" (https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1)</p> <p></p>
--	--	--

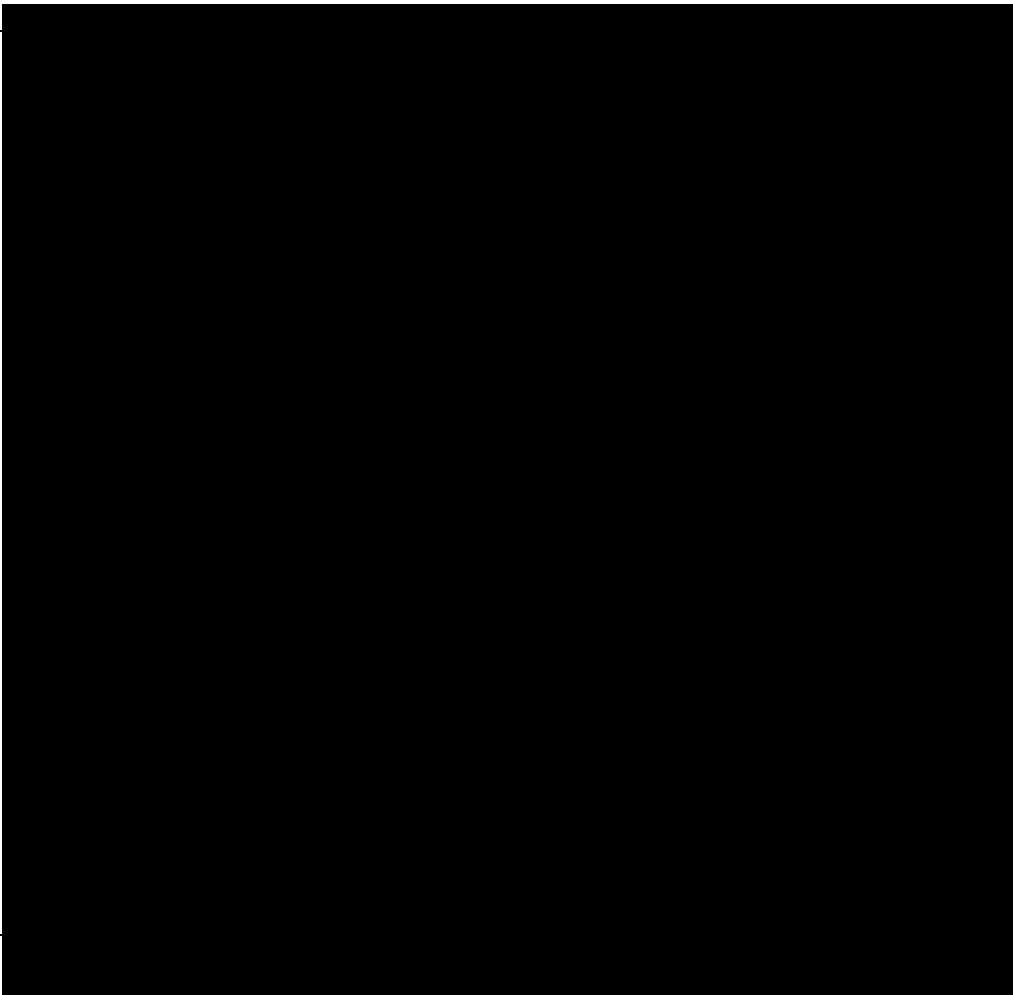
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



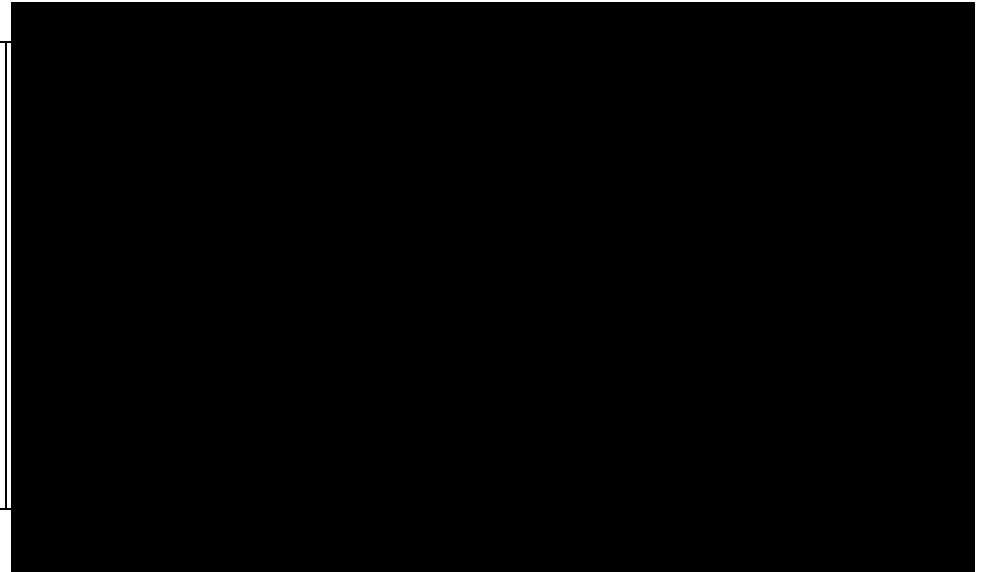
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



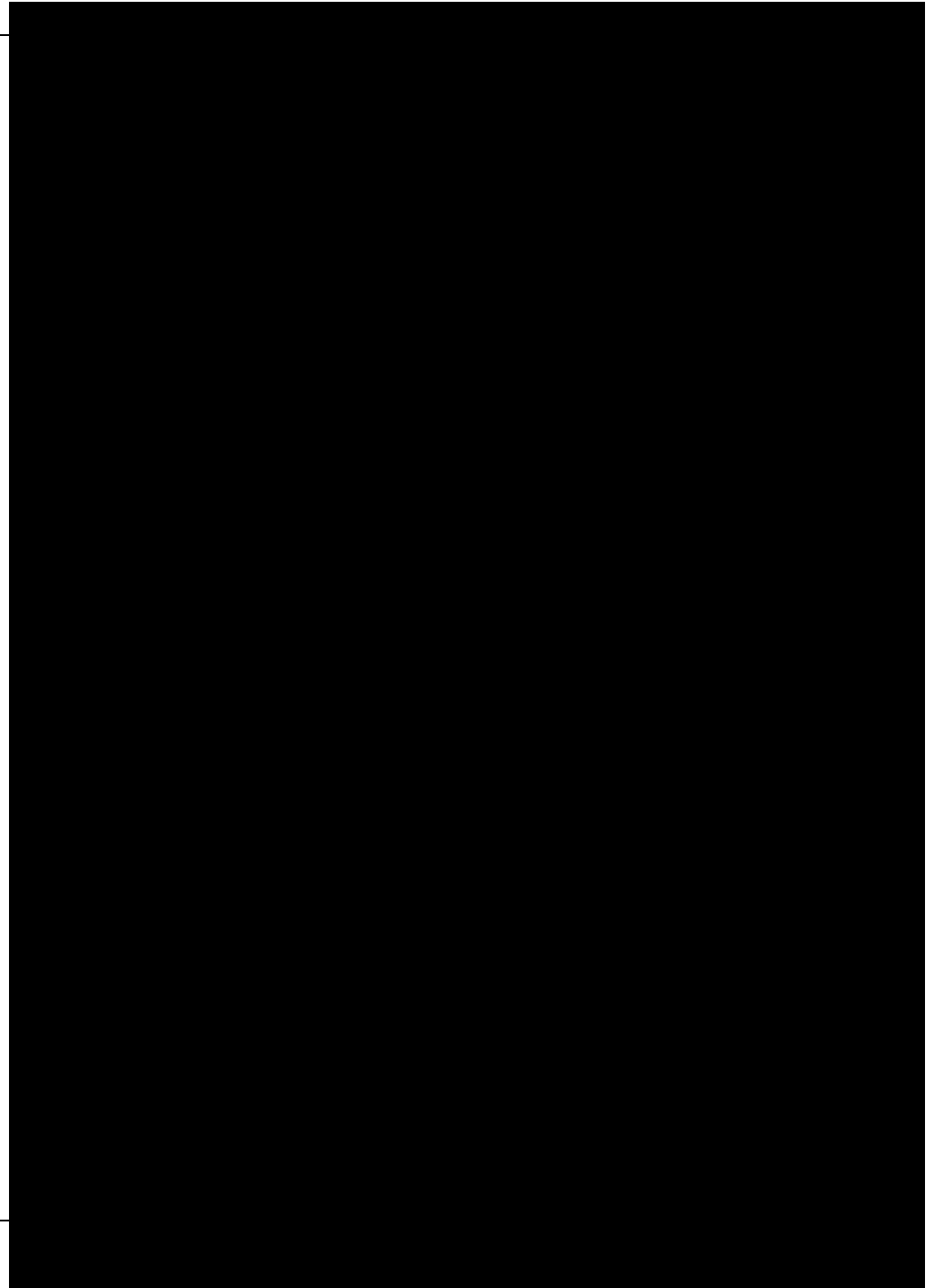
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

01980-00181/12487176.9	01980-00181/12487176.5



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

See e.g. [8] at Fig. 4 and 12:50-65:

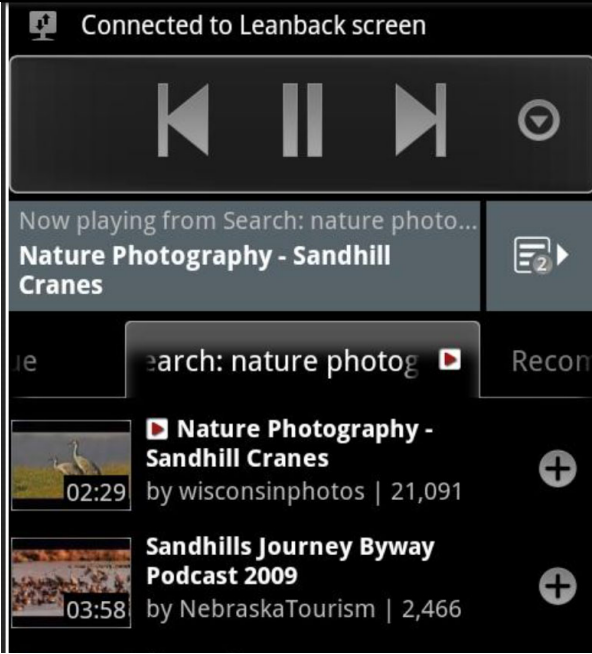
In some examples, any application of applications 130 executed by processor 132 may require data from one or more of servers, such as servers 24 shown in FIG. 1. Network module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor 132 for further processing. Network module 136 may support wireless or wired communication, and includes appropriate hardware and software to provide wireless or wired communication. For example, network module 136 may include an antenna, modulators, demodulators, amplifiers, and other circuitry to effectuate communication between controlled device 118 and one or more servers associated with a network. Network module may 100 may communicate with one or more servers associated with the network according to a network communication protocol, such as, for example, hypertext transfer protocol (HTTP), HTTP secured by transport layer security or secure sockets

See e.g. [8] at 13:4-15:

Controlled device 118 may be used, in some examples, in conjunction with a remote control, such as remote control 14 shown in FIG. 1, remote controls 62 shown in FIG. 2, or remote control 75 shown in FIG. 3. For example, storage device 92 may store application instructions associated with a video application or web browser for displaying video content from the World Wide Web (e.g., YouTube® content, Hulu® content, Netflix® content, etc.). A user may interact with user interface 120 to execute the video or web browser application. Processor 120 then executes the video or web browser application and causes display 124 to display content to the user.

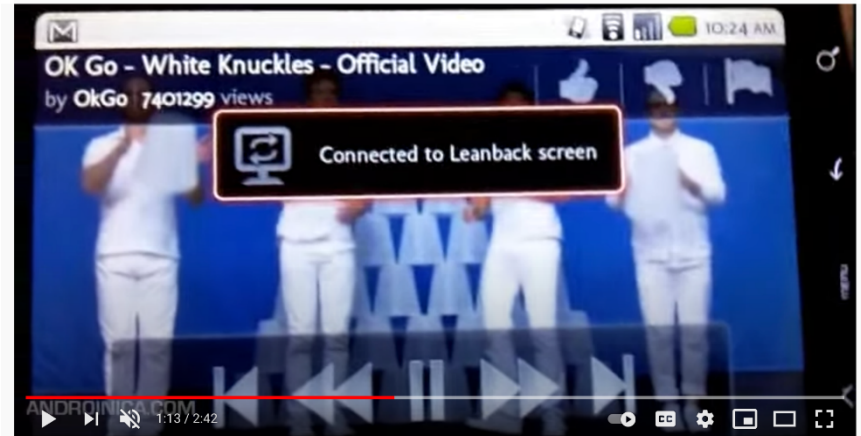
See e.g. [9]:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		 <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider I. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[13g]	<i>(b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and</i>	YT Remote System discloses (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

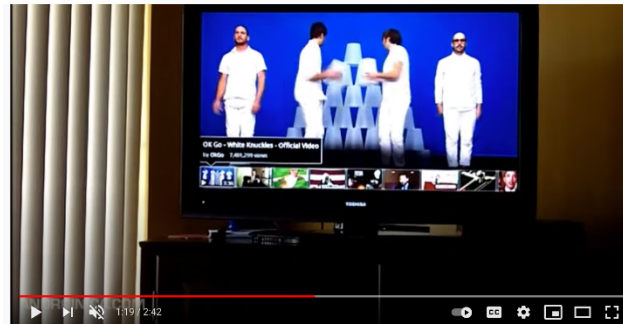
See e.g.: [4], based on the selection of the “Connect” icon by the user, the leanback screen takes over responsibility for playback of the remote playback queue from the computing device:



How to control Google TV or YouTube Leanback with YouTube Remote

3,069 views • Nov 14, 2010

2 4 SHARE SAVE ...



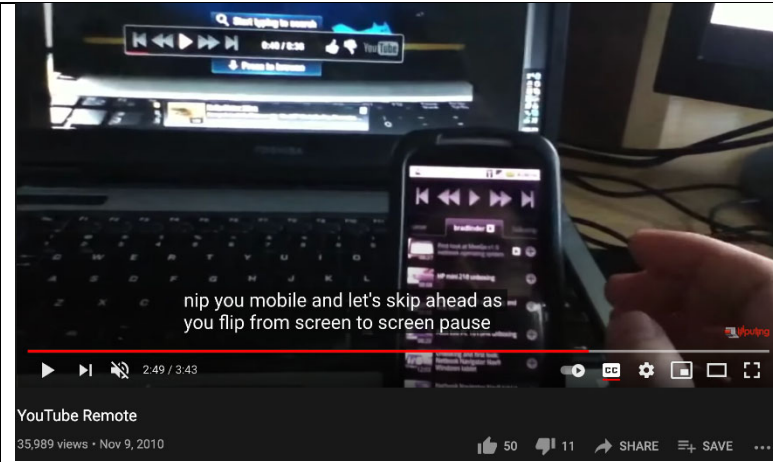
How to control Google TV or YouTube Leanback with YouTube Remote

3,069 views • Nov 14, 2010

2 4 SHARE SAVE ...

See also e.g. [2]:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [4] the user's phone (the control device) allows the user to press pause or play on the phone and the leanback screen in turns pauses or plays the video:



See e.g. [5]

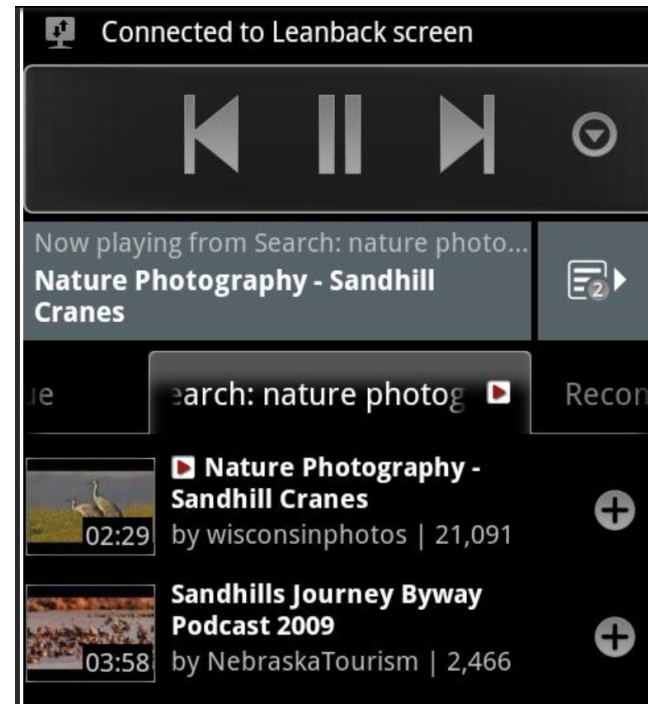
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer.</p> <p>You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.</p> <p><i>See e.g. [8] at 5:29-41:</i></p> <p>In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be used to present information to a user. For example, user interface 26 may display controls 30 and information 34 associated with content being played on controlled device 18. Controls 30 may depend on the capability of remote control 14 or controlled device 18, and include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new content, etc. The type and quantity of information 34 may also depend on the capability of remote control 14 and controlled device 18, and include, for example, playback information Such as time remaining of content, playlist information, content rating information, etc.).</p> <p><i>See [8] e.g. at 5:42-63:</i></p> <p>Controlled device 18 may include a variety of network enabled devices, such as a network enabled television, set top box, personal video recorder, or other device capable of being network-connected and controlled remotely. In an example, controlled device 18 is an Internet-connected television that is configured to receive signals from and transmit signals to network 14. For example, controlled device 18 may be configured to initiate contact with servers 24. For example, controlled device 18 may notify servers 24 that controlled device 18 is</p>
--	--	---

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

connected to network 22. Controlled device 18 may notify servers 24, for example, automatically upon being powered on. In another example, a user may log in to a user account maintained by the servers 24 using controlled device 18, thereby notifying servers 24 that controlled device 18 is connected to network 22. Controlled device 18 can also be configured to transmit a message to servers 24 of network 22 that identifies controlled device 18, which can be used by servers 24 to pair controlled device 18 with remote control 14. The message may also contain notification or content data for updating a user interface of remote control (e.g., indicating completion of a task, such as completing playback of content).

See e.g. [9]:

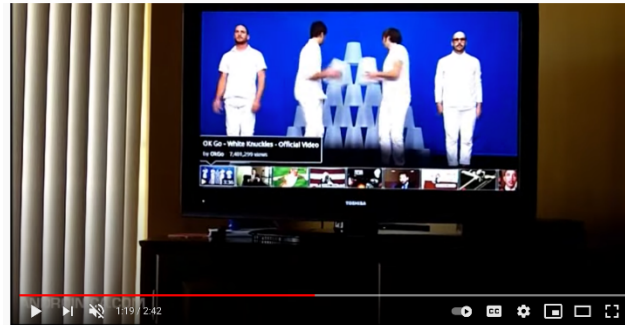


HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p><i>See e.g.</i> [10] “The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”</p> <p><i>See e.g.</i> [11]:</p> <p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to <u>keep other remotes handy</u>.</p> <p><i>See</i> for example Google source code referenced in elements [13pre]-[13f] above.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google’s Invalidity Contentions Cover Pleading.</p>
[13h]	<p><i>causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.</i></p>	<p>YT Remote System discloses causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

See e.g.: [4], based on the selection of the “Connect” icon by the user, the leanback screen takes over responsibility for playback of the remote playback queue from the computing device:

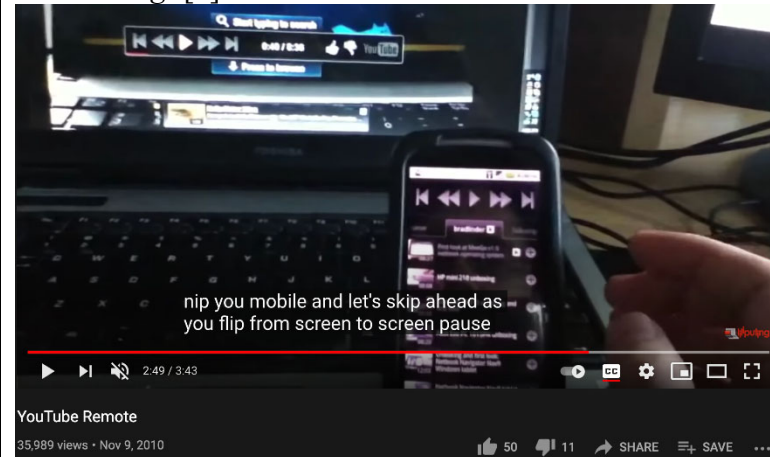


How to control Google TV or YouTube Leanback with YouTube Remote

3,069 views • Nov 14, 2010

2 4 SHARE SAVE ...

See also e.g. [2]:



YouTube Remote

35,989 views • Nov 9, 2010

50 11 SHARE SAVE ...

See e.g. [4] the user’s phone (the control device) allows the user to press pause or play on the phone and the leanback screen in turns pauses or plays the video:

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



See e.g. [5]

YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer.

You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.

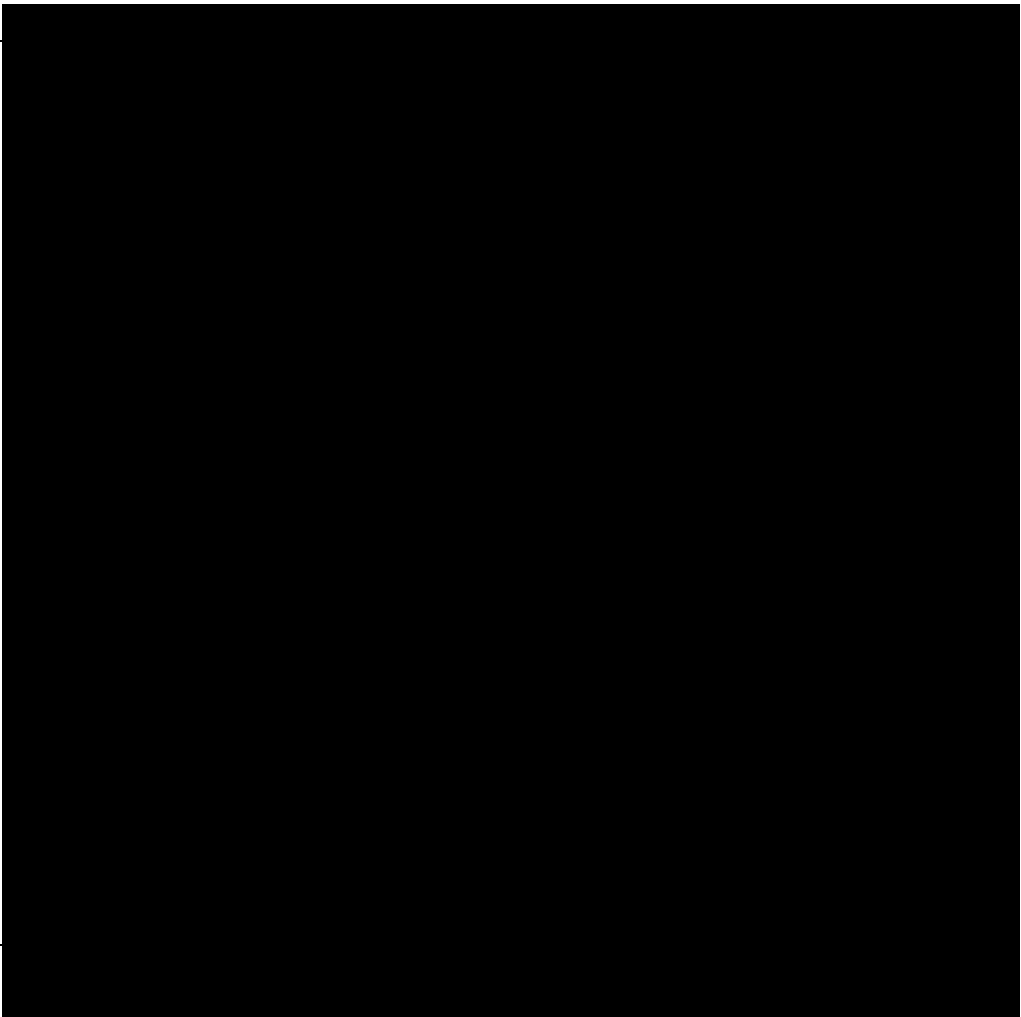
The leanback screen retrieves the multimedia content from the YouTube servers and the user's account/personalized feed for playback.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--	--

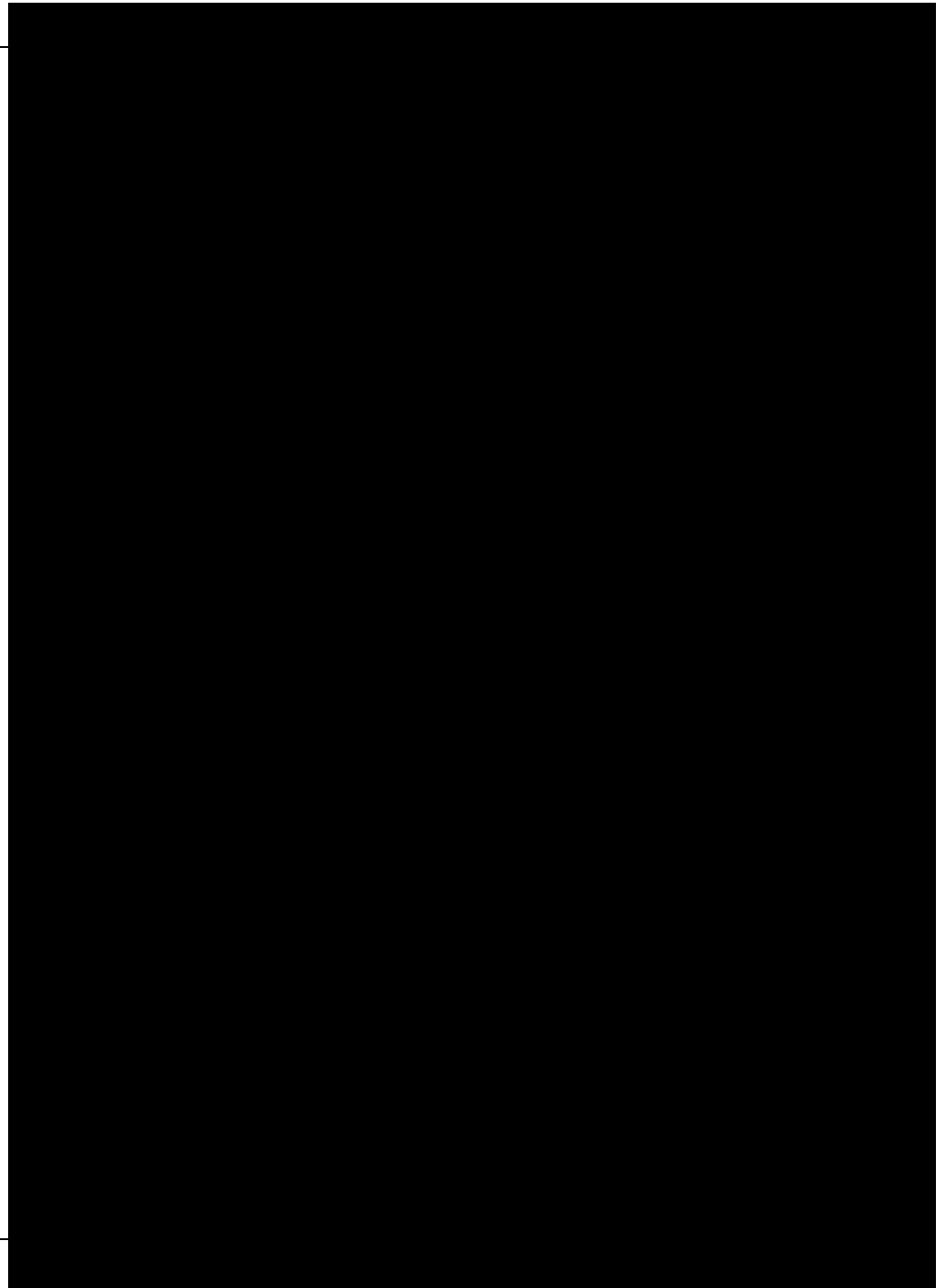
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

01980-00181/12487176.9	01980-00181/12487176.5



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

See e.g. [8] at 5:29-41:

In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be used to present information to a user. For example, user interface 26 may display controls 30 and information 34 associated with content being played on controlled device 18. Controls 30 may depend on the capability of remote control 14 or controlled device 18, and include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new content, etc. The type and quantity of information 34 may also depend on the capability of remote control 14 and controlled device 18, and include, for example, playback information Such as time remaining of content, playlist information, content rating information, etc.).

See e.g. [8] at 18:55-19:22:

FIG. 9 is a flowchart illustrating an example operation of a controlled device communicating with a network server, in accordance with one aspect of the present disclosure. For purposes of illustration only, the method of FIG. 9 is described with respect to networked environment 10 of FIG. 1, though various other systems and/or devices may be utilized to implement or perform the method shown in FIG. 9. In some examples, server 24 receives a message from controlled device 18 having a controlled device identifier and content information (250). For example, the message from controlled device 18 may contain an SID issued by servers 24 that identifies controlled device 18 as being part of a session. In addition, the message may contain content information intended to notify a user of an event regarding controlled device 18, or to prompt a user of remote control 14 to take an action (e.g., notification that playback has stopped, notification that playback of new content has begun, and the like). The content information may be used, for example, to update a user interface of remote control 14. After receiving the message from controlled device 18, server 24 retrieves a remote control identifier that identifies one or more remote controls 14 intended to receive the content information (224). For example, server 24 may query a database of stored identification

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p>numbers to determine which remote control 14 is associated with the session that includes the remote control identifier. Server 24 then transmits a message to the intended recipients (one or more remote controls 14) of the content information (258). In some examples, server 24 forwards the content information from the first message directly to one or more remote controls 14. In other examples, server 24 may process and/or repackage the content information of the message from controlled device 18 into a new message, which can be sent to the intended recipients of the content information.</p> <p>See for example Google source code referenced in elements [13pre]-[13g] above.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Riders 1-J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[14a]	<p><i>The tangible, non-transitory computer readable medium of claim 13, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair,</i></p>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair.</p> <p>See e.g. [10]:</p> <p>“The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.”</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p><i>See e.g.</i> [11]:</p> <p>Update: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to <u>keep other remotes handy</u>.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider K. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[14b]	<p><i>wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair.</i></p>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider K. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

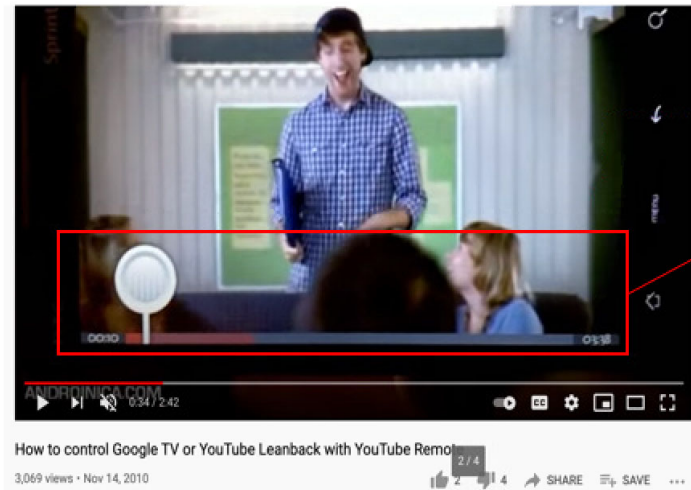
[15a]	<i>The tangible, non-transitory computer readable medium of claim 13, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device,</i>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider K. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[15b]	<i>wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony.</i>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider K. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading..</p>
[18]	<i>The tangible, non-transitory computer readable medium of claim 13, wherein the method further comprises detecting a set of inputs to transfer playback from the playback device</i>	The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein the method further comprises detecting a set of inputs to transfer playback

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device.

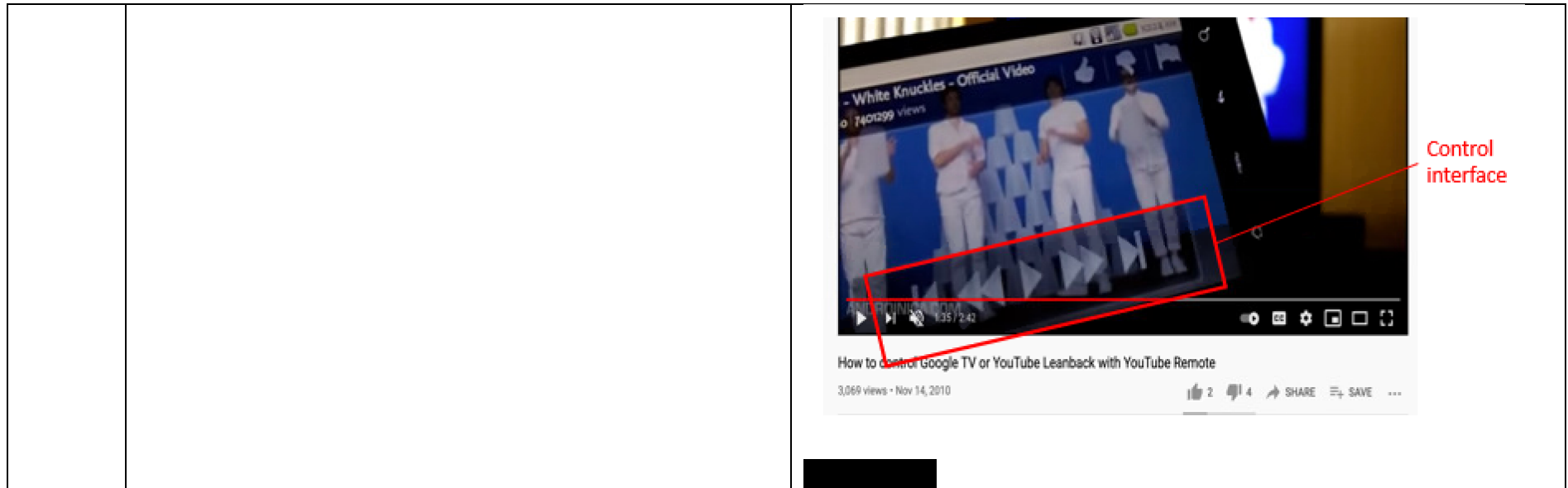
from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device.

See e.g. [4]:



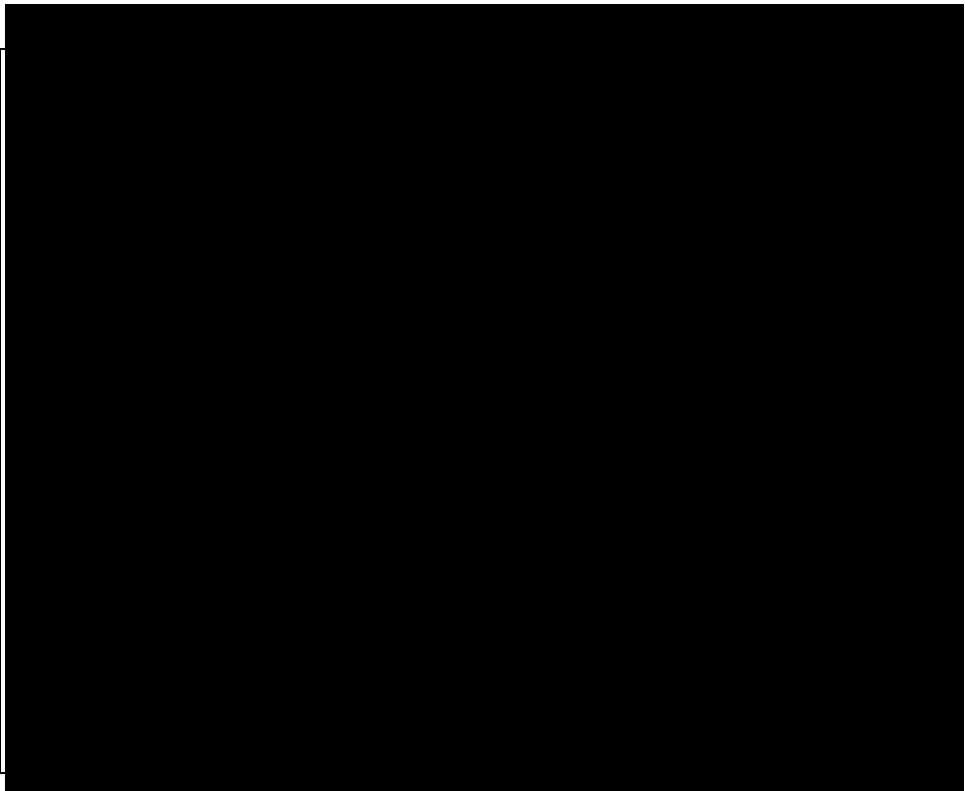
Control
interface

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



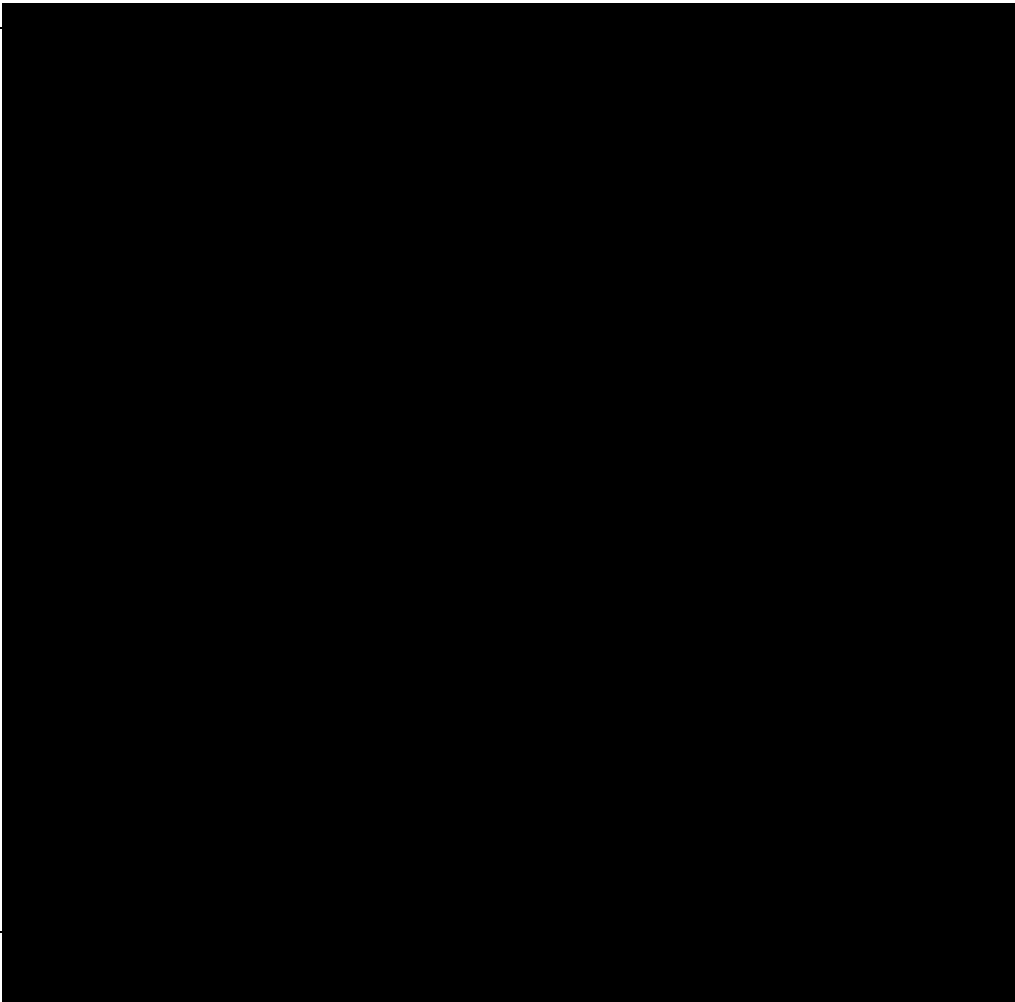
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



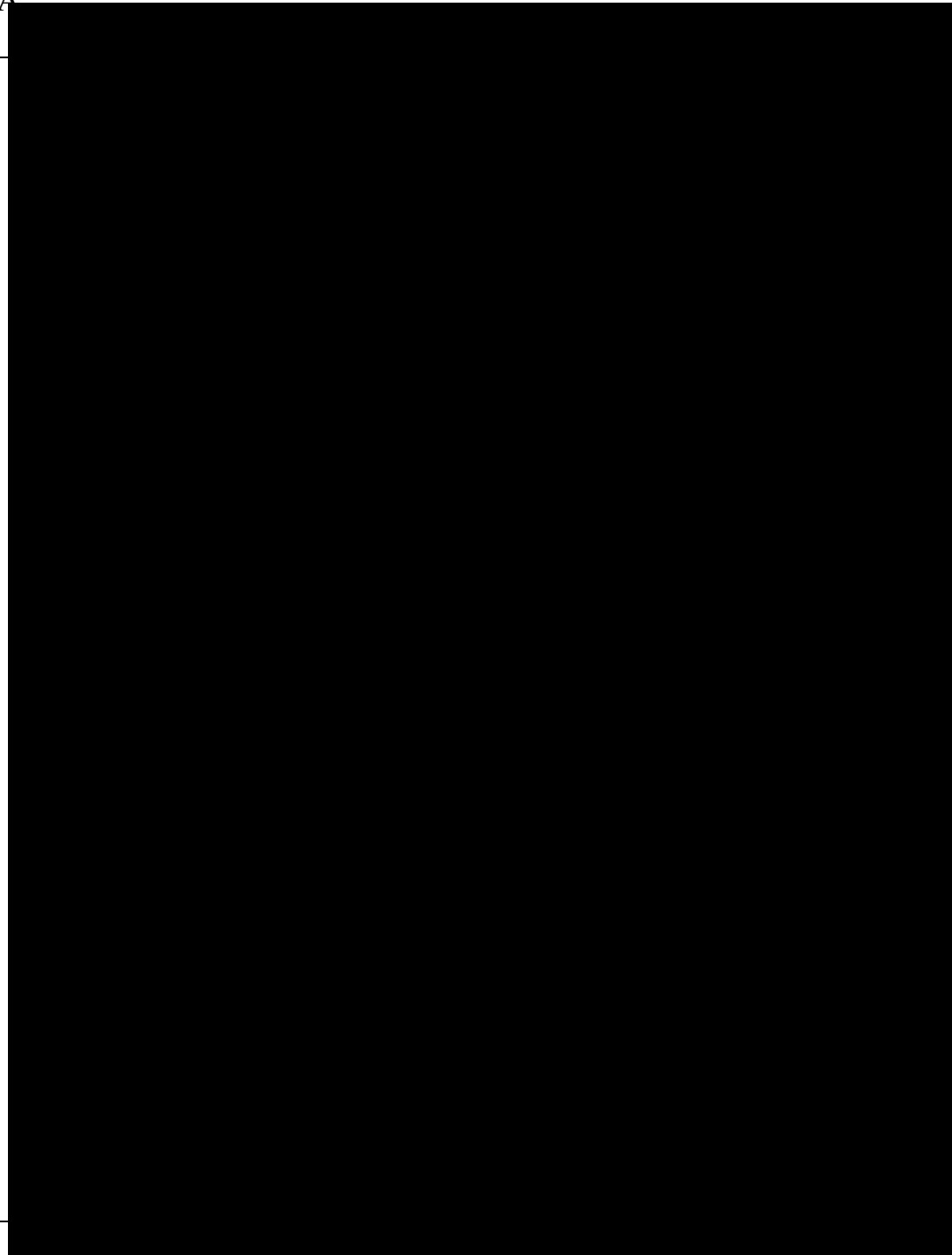
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



HIGHLY CONFIDENTIAL

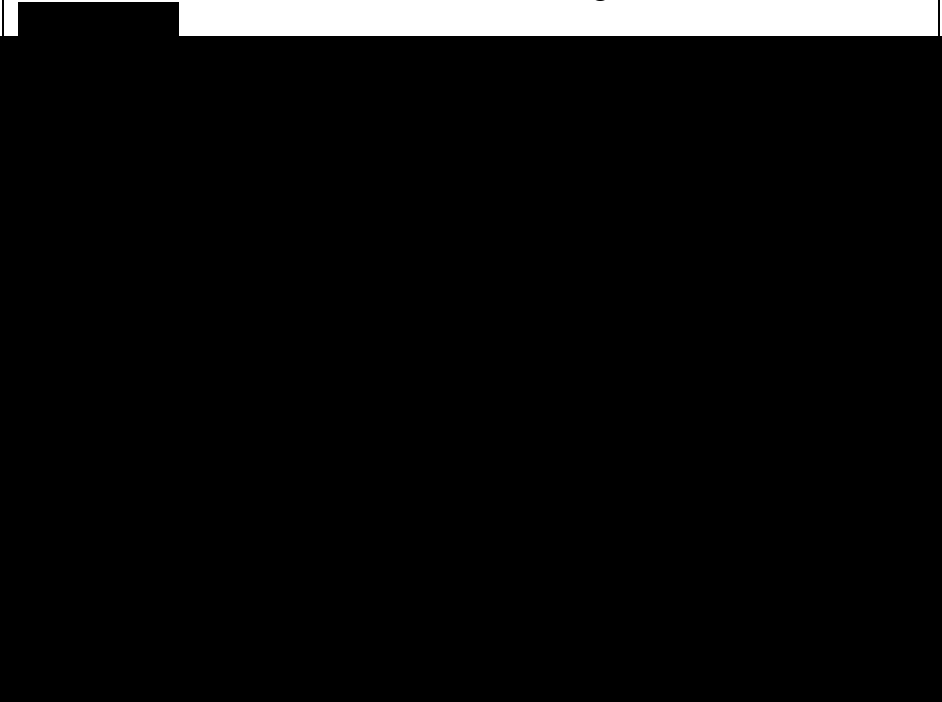
01980-00181/12487176.9	01980-00181/12487176.5



HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p><i>See e.g.</i> [8] at 5:29-41:</p> <p>In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be used to present information to a user. For example, user interface 26 may display controls 30 and information 34 associated with content being played on controlled device 18. Controls 30 may depend on the capability of remote control 14 or controlled device 18, and include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new content, etc. The type and quantity of information 34 may also depend on the capability of remote control 14 and controlled device 18, and include, for example, playback information Such as time remaining of content, playlist information, content rating information, etc.).</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Riders J-K. Further discussion of obviousness of this claim element is provided in Google’s Invalidity Contentions Cover Pleading.</p>
[19a]	<i>The tangible, non-transitory computer readable medium of claim 13, wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and</i>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface.</p> <p><i>See e.g.</i> claim [18] above.</p>
[19b]	<i>wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement.</i>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

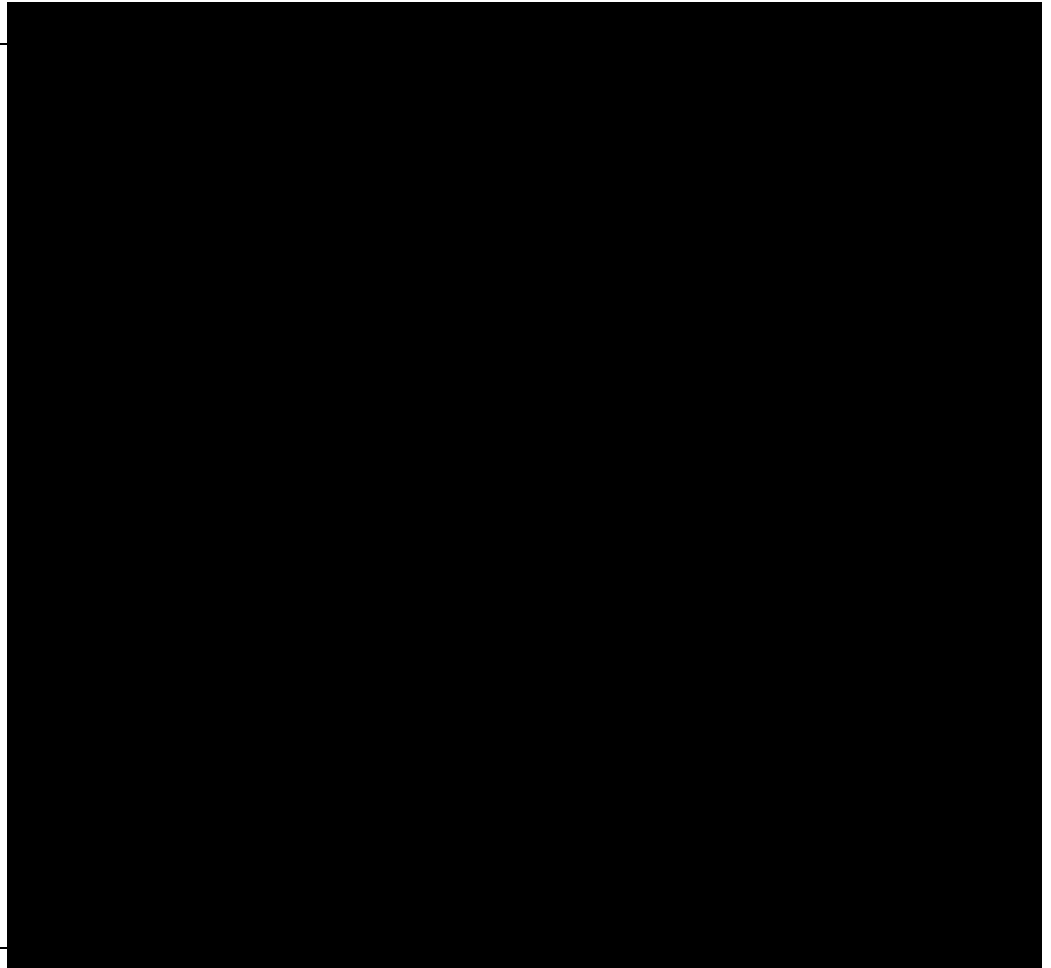
		<p>interface to display the one or more transport controls to control playback by the playback device in the particular arrangement.</p> <p><i>See e.g. claim [18] above.</i></p>
[20]	<p><i>The tangible, non-transitory computer readable medium of claim 13, wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service.</i></p>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service.</p> 

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--	--

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

--	--



1. *Journal of the American Medical Association*, 1997; 277: 103-107.

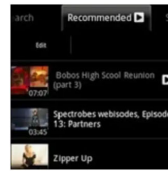
HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

		<p><i>See e.g.</i> [8] at 1:39-50:</p> <p>In general, this disclosure is directed to techniques for exchanging information between a networked device. Such as a network-enabled television, and web-enabled device, Such as a remote control, via a network service (e.g., a "cloud service"). In an example, the web-enabled device can transmit control information via the network service to the networked device to control playback of media content (e.g., audio and/or video content) on the networked device. In another example, the networked device can transmit content information via the network service to the web-enabled device. Such as status information concerning the networked device.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider I. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[21]	<p><i>The tangible, non-transitory computer readable medium of claim 13, wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device.</i></p>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device.</p> <p>To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Riders I-J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.</p>
[23]	<p><i>The tangible, non-transitory computer readable medium of claim 13, wherein detecting the set of inputs comprises</i></p>	<p>The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein</p>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

	<i>detecting an input that causes playback at the control device to be stopped.</i>	detecting the set of inputs comprises detecting an input that causes playback at the control device to be stopped. <i>See claim element [13g] above.</i>
[24]	<i>The tangible, non-transitory computer readable medium of claim 13, wherein detecting the set of inputs comprises detecting selection of a button on the control interface.</i>	The disclosures in independent claim [13] are hereby incorporated by reference. In addition, YT Remote System discloses wherein detecting the set of inputs comprises detecting selection of a button on the control interface. <i>See claim element [13d] above.</i>
[25pre]	<i>A control device comprising: a graphical interface; a wireless communication interface to communicate with a playback device; one or more processors; tangible non-transitory computer-readable media having instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the control device to perform functions comprising:</i>	YT Remote System discloses a graphical interface; a wireless communication interface to communicate with a playback device; one or more processors; tangible non-transitory computer-readable media having instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the control device to perform functions comprising. <i>See e.g. [1]: “YouTube Remote creates a virtual connection between your phone and YouTube Leanback. To ‘pair’ your phone with your Leanback screen, simply sign into YouTube Remote on your Android phone, and to YouTube Leanback on your Google TV or computer with the same YouTube account. Just like that, you’ve connected your powerful multi-touch Android screen with the biggest screen in your home. Once connected, you can use the rich browse and discovery interface on YouTube Remote to find and queue up videos to watch, and send them all to Leanback with a single tap. With YouTube Remote you can play, pause, skip forward and back and even control the sound volume.”</i> <i>See e.g. [5]</i>

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY



Android: YouTube Remote is a free remote control tool that links the full-screen experience of YouTube Leanback with the convenience of having a touch-screen remote and playlist builder on your Android device.

See e.g. [8] at 1:39-50:

In general, this disclosure is directed to techniques for exchanging information between a networked device. Such as a network-enabled television, and web-enabled device, Such as a remote control, via a network service (e.g., a "cloud service"). In an example, the web-enabled device can transmit control information via the network service to the networked device to control playback of media content (e.g., audio and/or video content) on the networked device. In

another example, the networked device can transmit content information via the network service to the web-enabled device. Such as status information concerning the networked device.

See also [8] at 3:14-55:

Techniques of this disclosure relate to a network service or "cloud service" that acts as an intermediary between a remote control device and a controlled device. For example, the network service may receive commands from a remote control and transmit the commands to a controlled device. The network service may also receive commands or other information from the controlled device and transmit those commands or other information to the remote control. The remote control may include a remote control application executing on a mobile device. Such as a cellular telephone or a tablet computer. The controlled device may include any Internet-connected device capable of receiving commands, Such as an Internet-connected television, a set top box, a personal video recorder, a gaming console, or other networked device. In one aspect, the remote control and the controlled device may operate as simple Hypertext Transfer Protocol HTTP

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

clients of the network service. That is, the controlled device does not operate as a server to the remote control. Thus, any HTTP-enabled device may operate as a remote control or as a controlled device. In general, the remote control and the controlled device are configured to both listen for messages from the network service and send messages to the network service. In some examples, the network service controls pairing one or more remote controls and one or more controlled devices, receives information or commands from remote controls and controlled devices, and sends information or commands to remote controls and controlled devices. The network service may direct received information and commands to the appropriate devices based on pairing information maintained by the network service. A remote control may be configured to send a message to a controlled device to perform a task, Such as stopping playback of media content playing on the controlled devices or changing the media content playing on the controlled devices. To accomplish the task, the remote control first sends a message to the network service. The network service then determines the controlled device that is paired with the remote control and forwards the message to the appropriate controlled device. The controlled device receives the message from the network service and performs the task in response to receiving the message.

[REDACTED]

To the extent it is argued that this reference does not disclose this claim element, it would have at least been obvious to combine this reference with prior art including the references cited in Rider J. Further discussion of obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[25a]	<i>causing the graphical interface to display a control interface including one or more transport controls to control playback by the control device;</i>	See claim element [13a] above.
[25b]	<i>after connecting to a local area network via the wireless communication interface, identifying playback devices connected to the local area network;</i>	See claim element [13b] above.
[25c]	<i>causing the graphical interface to display a selectable option for transferring playback from the control device;</i>	See claim element [13c] above.
[25d]	<i>detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network;</i>	See claim element [13d] above.
[25e]	<i>after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device, wherein transferring playback from the control device to the particular playback device comprises:</i>	See claim element [13e] above.
[25f]	<i>(a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service</i>	See claim element [13f] above.
[25g]	<i>(b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and</i>	See claim element [13g] above.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

[25h]	<i>causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.</i>	See claim element [13h] above.
[26]	<i>The control device of claim 25, wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony.</i>	See claim elements [3a] and [3b] above.
[28]	<i>The control device of claim 25, wherein detecting the set of inputs comprises detecting an input that causes playback at the control device to be stopped.</i>	See claim element [11] above.
[29]	<i>The control device of claim 25, wherein detecting the set of inputs comprises detecting selection of a button on the control interface.</i>	See claim element [12] above.

HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY